To: CN=Jane Diamond/OU=R9/O=USEPA/C=US@EPA;CN=Nancy Lindsay/OU=R9/O=USEPA/C=US@EPA;CN=Kathleen Salyer/OU=R9/O=USEPA/C=US@EPA;CN=Michael Montgomery/OU=R9/O=USEPA/C=US@EPA;CN=Mary Simms/OU=R9/O=USEPA/C=US@EPA;CN=Rusty Harris-Bishop/OU=R9/O=USEPA/C=US@EPA;CN=Kelly Manheimer/OU=R9/O=USEPA/C=US@EPA;CN=John Chesnutt/OU=R9/O=USEPA/C=US@EPA;CN=Daniel Stralka/OU=R9/O=USEPA/C=US@EPA;CN=Bethany Dreyfus/OU=R9/O=USEPA/C=US@EPA;CN=Mathew Plate/OU=R9/O=USEPA/C=US@EPA[]; N=Nancy Lindsay/OU=R9/O=USEPA/C=US@EPA;CN=Kathleen Salyer/OU=R9/O=USEPA/C=US@EPA;CN=Michael Montgomery/OU=R9/O=USEPA/C=US@EPA;CN=Mary Simms/OU=R9/O=USEPA/C=US@EPA;CN=Rusty Harris-Bishop/OU=R9/O=USEPA/C=US@EPA;CN=Kelly Manheimer/OU=R9/O=USEPA/C=US@EPA;CN=John Chesnutt/OU=R9/O=USEPA/C=US@EPA;CN=Daniel Stralka/OU=R9/O=USEPA/C=US@EPA;CN=Bethany Dreyfus/OU=R9/O=USEPA/C=US@EPA;CN=Mathew Plate/OU=R9/O=USEPA/C=US@EPA[]; N=Kathleen Salyer/OU=R9/O=USEPA/C=US@EPA;CN=Michael Montgomery/OU=R9/O=USEPA/C=US@EPA;CN=Mary Simms/OU=R9/O=USEPA/C=US@EPA;CN=Rusty Harris-Bishop/OU=R9/O=USEPA/C=US@EPA;CN=Kelly Manheimer/OU=R9/O=USEPA/C=US@EPA;CN=John Chesnutt/OU=R9/O=USEPA/C=US@EPA;CN=Daniel Stralka/OU=R9/O=USEPA/C=US@EPA;CN=Bethany Dreyfus/OU=R9/O=USEPA/C=US@EPA;CN=Mathew Plate/OU=R9/O=USEPA/C=US@EPA[]; N=Michael Montgomery/OU=R9/O=USEPA/C=US@EPA;CN=Mary Simms/OU=R9/O=USEPA/C=US@EPA;CN=Rusty Harris-Bishop/OU=R9/O=USEPA/C=US@EPA;CN=Kelly Manheimer/OU=R9/O=USEPA/C=US@EPA;CN=John Chesnutt/OU=R9/O=USEPA/C=US@EPA;CN=Daniel Stralka/OU=R9/O=USEPA/C=US@EPA;CN=Bethany Dreyfus/OU=R9/O=USEPA/C=US@EPA;CN=Mathew Plate/OU=R9/O=USEPA/C=US@EPA[]; N=Mary Simms/OU=R9/O=USEPA/C=US@EPA;CN=Rusty Harris-Bishop/OU=R9/O=USEPA/C=US@EPA;CN=Kelly Manheimer/OU=R9/O=USEPA/C=US@EPA;CN=John Chesnutt/OU=R9/O=USEPA/C=US@EPA;CN=Daniel Stralka/OU=R9/O=USEPA/C=US@EPA;CN=Bethany Dreyfus/OU=R9/O=USEPA/C=US@EPA;CN=Mathew Plate/OU=R9/O=USEPA/C=US@EPA[]; N=Rusty Harris-Bishop/OU=R9/O=USEPA/C=US@EPA;CN=Kelly Manheimer/OU=R9/O=USEPA/C=US@EPA;CN=John Chesnutt/OU=R9/O=USEPA/C=US@EPA;CN=Daniel Stralka/OU=R9/O=USEPA/C=US@EPA;CN=Bethany Dreyfus/OU=R9/O=USEPA/C=US@EPA;CN=Mathew Plate/OU=R9/O=USEPA/C=US@EPA[]; N=Kelly Manheimer/OU=R9/O=USEPA/C=US@EPA;CN=John Chesnutt/OU=R9/O=USEPA/C=US@EPA;CN=Daniel Stralka/OU=R9/O=USEPA/C=US@EPA;CN=Bethany Dreyfus/OU=R9/O=USEPA/C=US@EPA;CN=Mathew Plate/OU=R9/O=USEPA/C=US@EPA[]; N=John Chesnutt/OU=R9/O=USEPA/C=US@EPA;CN=Daniel Stralka/OU=R9/O=USEPA/C=US@EPA;CN=Bethany Dreyfus/OU=R9/O=USEPA/C=US@EPA;CN=Mathew Plate/OU=R9/O=USEPA/C=US@EPA[]; N=Daniel Stralka/OU=R9/O=USEPA/C=US@EPA;CN=Bethany Dreyfus/OU=R9/O=USEPA/C=US@EPA;CN=Mathew Plate/OU=R9/O=USEPA/C=US@EPA[]; N=Bethany Dreyfus/OU=R9/O=USEPA/C=US@EPA;CN=Mathew Plate/OU=R9/O=USEPA/C=US@EPA[]; N=Mathew Plate/OU=R9/O=USEPA/C=US@EPA[]
Cc: []
From: CN=Alana Lee/OU=R9/O=USEPA/C=US
Sent: Thur 5/31/2012 6:45:22 PM

Subject: Mountain View Voice Article: EPA finds high levels of toxic vapors in NASA building - May 31, 2012
MAIL_RECEIVED: Thur 5/31/2012 6:45:24 PM
http://mv-voice.com/news/show_story.php?id=5674
lsiegel@cpeo.org
military@lists.cpeo.org
Daniel DeBolt
Hotspot
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environment.arc.nasa.gov/reports/map.html
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http://lists.cpeo.org/listinfo.cgi/military-cpeo.org
(embedded image)
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(embedded image)

Mountain View Voice article....courtesy of Lenny Siegel. See also Lenny's note he added to email to CPEO's Military Environmental Forum listserve.

My quotes appear to be from the May 10, 2012 Moffett Field RAB meeting.

For the entire article, see
http://mv-voice.com/news/show_story.php?id=5674

----- Forwarded by Alana Lee/R9/USEPA/US on 05/31/2012 11:40 AM -----

From: Lenny Siegel <LSiegel@cpeo.org>
To: Alana Lee/R9/USEPA/US@EPA, Don Chuck <donald.m.chuck@nasa.gov>, Scott Anderson <scott.d.anderson@navy.mil>
Date: 05/31/2012 11:30 AM
Subject: Fwd: [CPEO-MEF] VOCs: "EPA finds high levels of toxic vapors in NASA [Moffett Field, CA] building"

FYI

Begin forwarded message:

From: Lenny Siegel <lsiegel@cpeo.org>
Date: May 31, 2012 11:20:46 AM PDT
To: Military Environmental Forum <military@lists.cpeo.org>
Subject: [CPEO-MEF] VOCs: "EPA finds high levels of toxic vapors in NASA [Moffett Field, CA] building"

[The 50 ug/m3 (micrograms per cubic meter) concentration of TCE found in Moffett Field's Building 10 requires mitigation under EPA's old (before the September 2011 IRIS assessment for TCE) occupational action level, but this building might also become a test case for EPA Region 9's proposed Removal Action Level, capping allowable short-term TCE concentrations in commercial buildings at 15 ug/m3. That is, the property owner (NASA) and responsible party (U.S. Navy) may have to demonstrate that concentrations in the building, after mitigation, never exceed 15 ug/m3). Interestingly, these are the same TCE levels (50 ug/m3) that led to the closure of PS51x elementary school in the Bronx, NY. - LS]

EPA finds high levels of toxic vapors in NASA building
Chemical TCE is exposing workers to dangerous fumes
by Daniel DeBolt
Mountain View Voice Staff

Photos

A building occupied by facilities workers at NASA Ames Research Center has 10 times the limit of toxic vapors coming from an underground plume, according to recent tests by the Environmental Protection Agency.

"Short-term exposure at that level, particularly for pregnant women, would be an issue," said Lenny Siegel, director of the Center for Public Environmental Oversight. "Birth defects are caused by short-term exposure."

The reading was taken over a large toxic plume flowing under northeastern Mountain View and Moffett Field. Fairchild, Intel and the United States Navy were among those who used the industrial solvent Trichloroethylene and either dumped it on the ground or leaked it from storage tanks over the years.

Known as Building 10, the former Navy structure appears to have been built in the 1930s and houses a massive boiler used to heat nearby buildings and a locker room for workers.

While the plume has been undergoing cleanup for more than a decade, tests have only recently begun of the air inside some of Moffett's buildings. Siegel said the delay was caused by a dispute between the Navy and NASA over which was responsible. The Navy left Moffett Field to NASA in 1994.

The source of the vapors is an underground steam tunnel connecting to Moffett's massive Hangar One. The EPA is pushing to have something done about tunnel, "which is serving as a conduit to this building," EPA project manager Alana Lee said. Inside the tunnel "we saw elevated levels of TCE greater than 1,000 micrograms per cubic meter," Lee told the Moffett Field Advisory Board.

After the EPA found the contaminated air, a temporary ventilation system was installed in Building 10 and the Navy is set to conduct follow-up measurements of the air inside. The Navy will also test 21 other buildings nearby.

"The Navy is working with NASA as well as EPA to find out about mitigating this building," Lee said of Building 10. "NASA does plan on using this building."

Elevated TCE levels have also been found inside the Moffett Field museum (Building 126), a portion of which was at 23 micrograms per cubic meter during the last published test in 2009.

TCE vapors were found inside Building 10 at 50 micrograms per cubic meter. To put the measurement in perspective, the EPA has recommended a limit of 15 micrograms per cubic meter for short-term exposure to workers at a nearby Google campus construction site, Siegel said. Five micrograms per cubic meter is the EPA limit for long-term exposures in the area's commercial buildings.

Siegel said that the long-term limit for commercial buildings would be only 2 micrograms per cubic meter if new information were implemented from a toxicological assessment of TCE released by the EPA last year. The

assessment found TCE "carcinogenic to humans by all routes of exposure" and says that inhalation can cause "hepatic, renal, neurological, immunological, reproductive and developmental effects."

Lee confirmed at a recent Moffett Field RAB meeting that there are no plans to change the cleanup requirements at Moffett in light of the latest TCE risk assessment.

"I don't necessarily agree, but the idea is you don't change everything you are doing every time there is a new risk assessment," Siegel said.

Siegel says NASA has raised issues about vapor intrusion from underground tunnels at Moffett for years. Hangar One may also require some unique mitigation if it is eventually restored.

"I've been warning people if we ever get Hangar One re-covered we'll have to test air inside," Siegel said. "It is so big air will be diluted. It will be an interesting study in the movement of VOCs in indoor air because it is such a large space to test. Does it accumulate near the roof, the floor? It is above the plume. I think the groundwater contamination under Hangar One is 100 parts per billion."

To keep track of the latest indoor air test results from the Navy and NASA visit environment.arc.nasa.gov/reports/map.html.

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